

FIG. 1

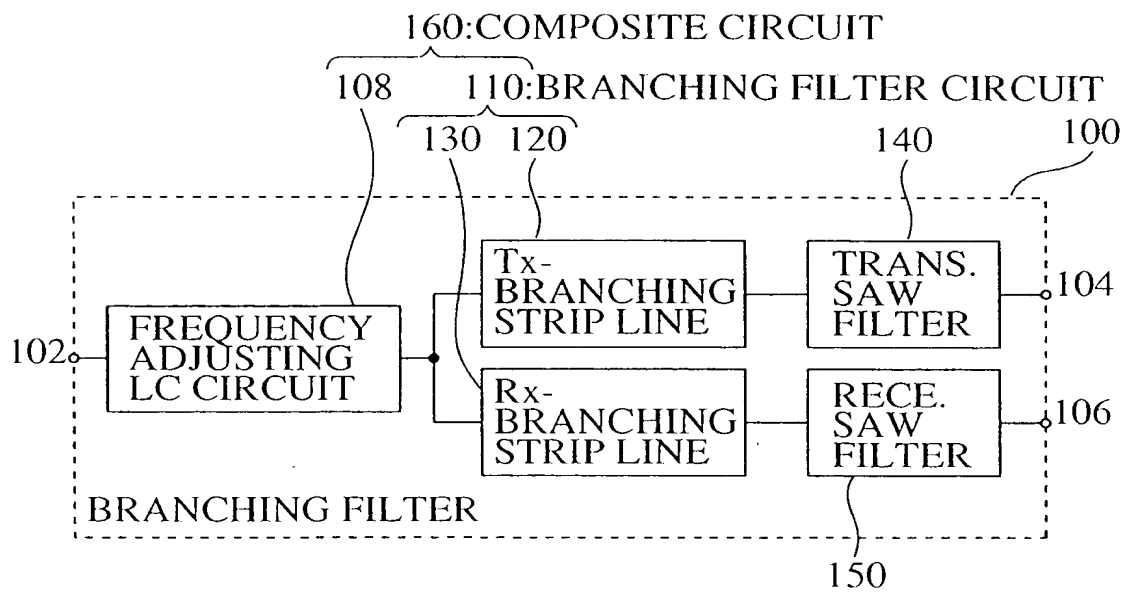


FIG. 2

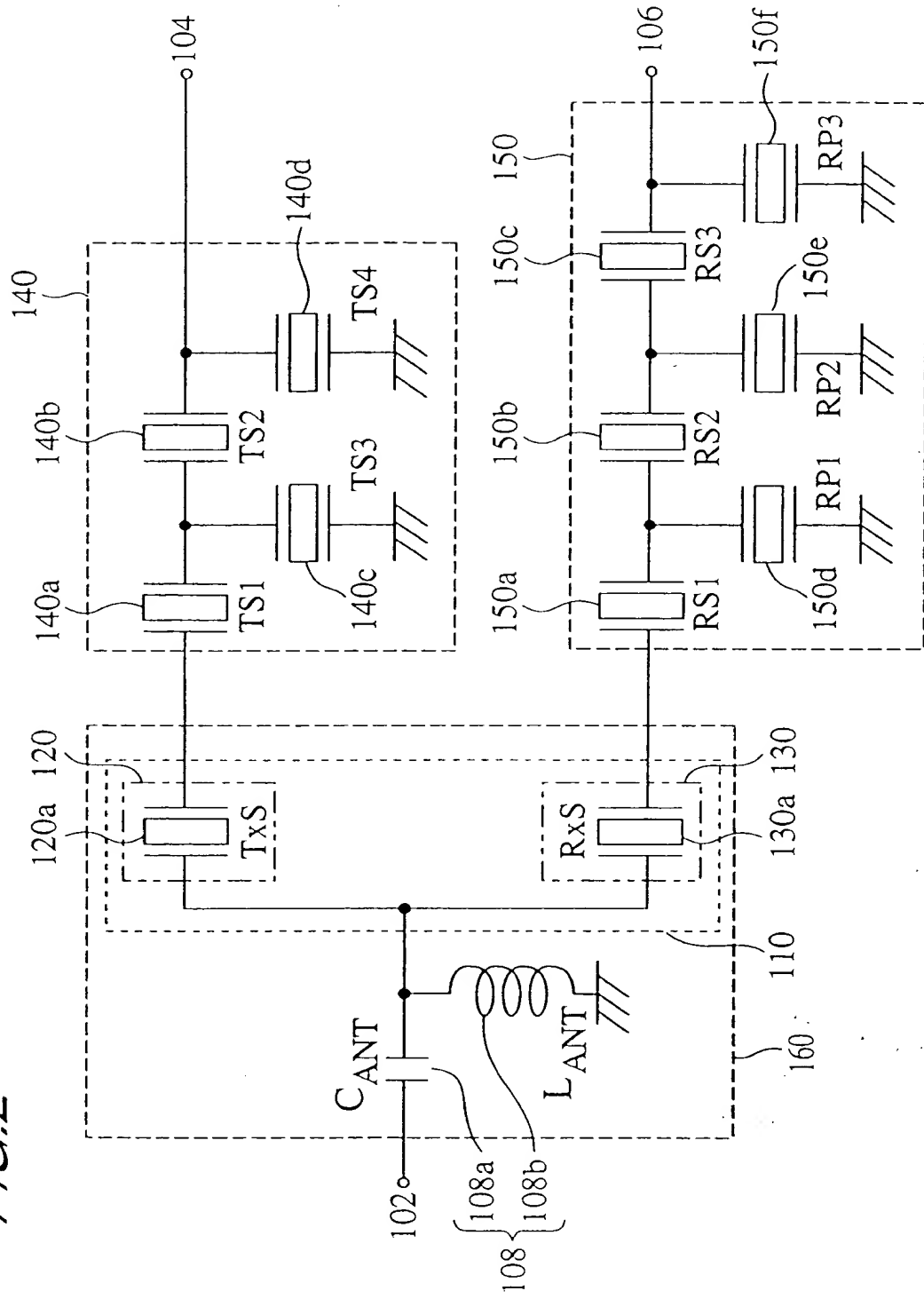


FIG. 3

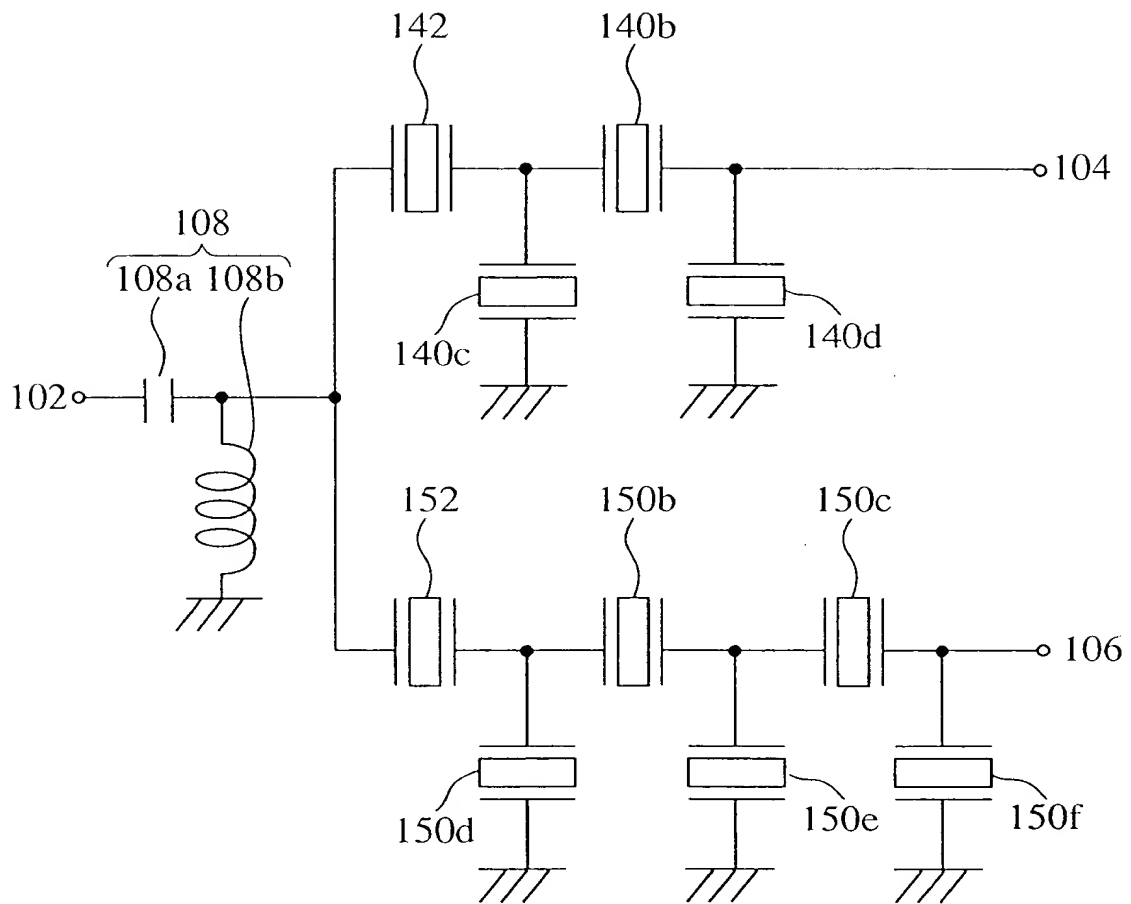


FIG. 4(A)

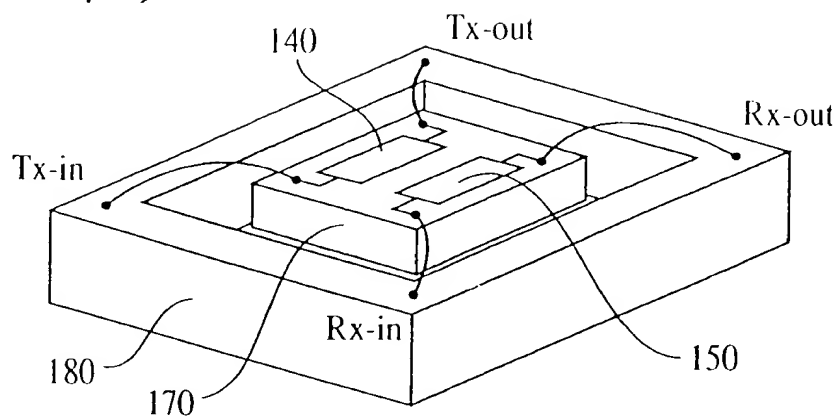


FIG. 4(B)

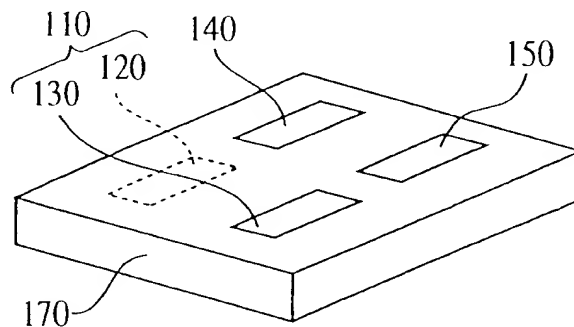


FIG. 4(C)

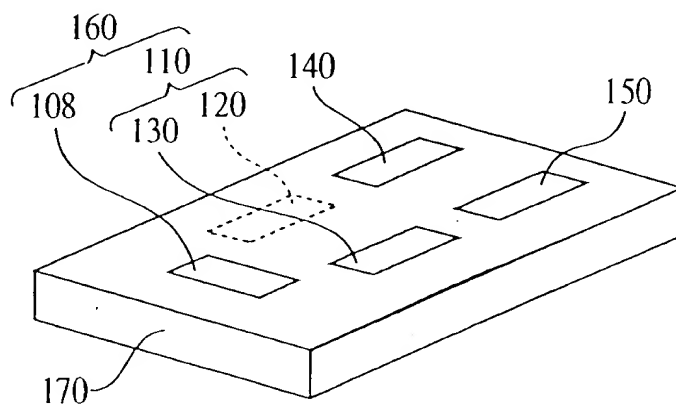


FIG. 5

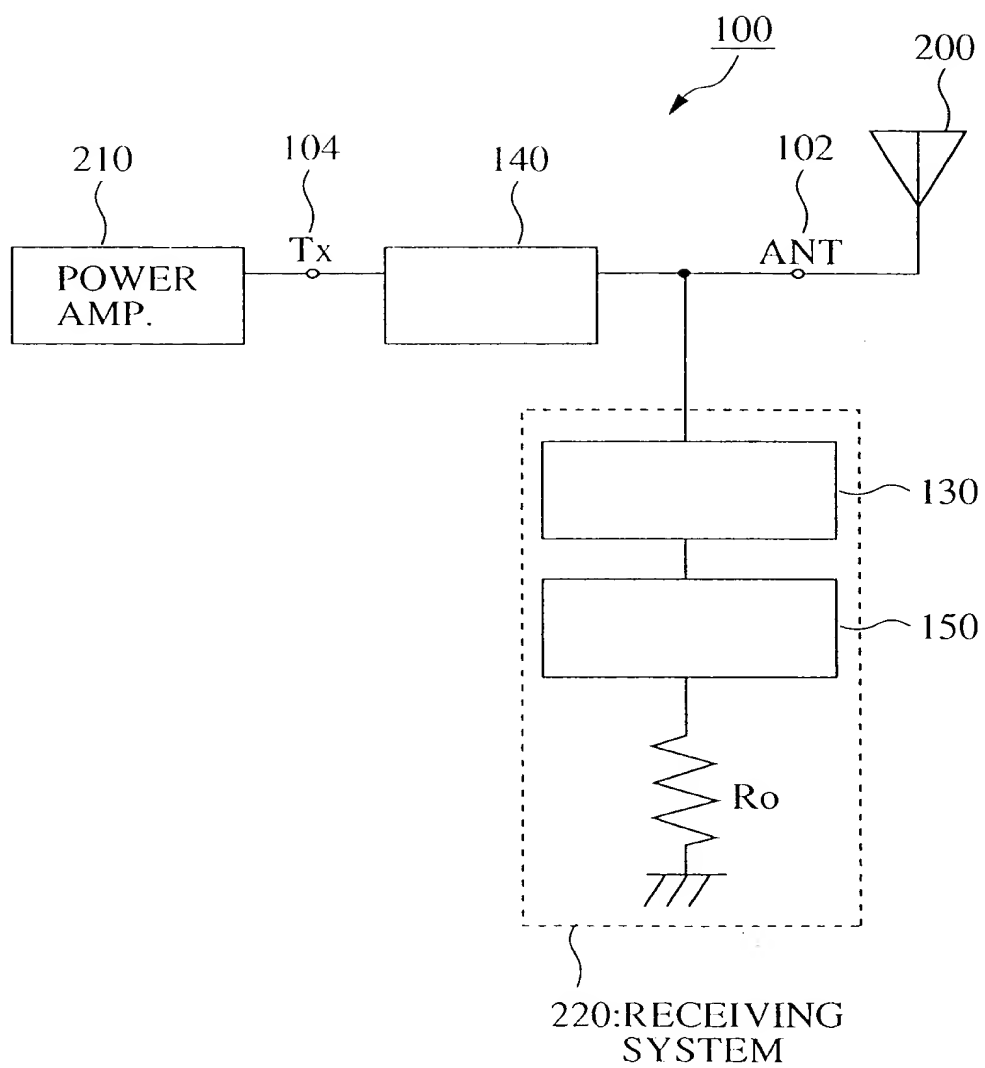


FIG. 6

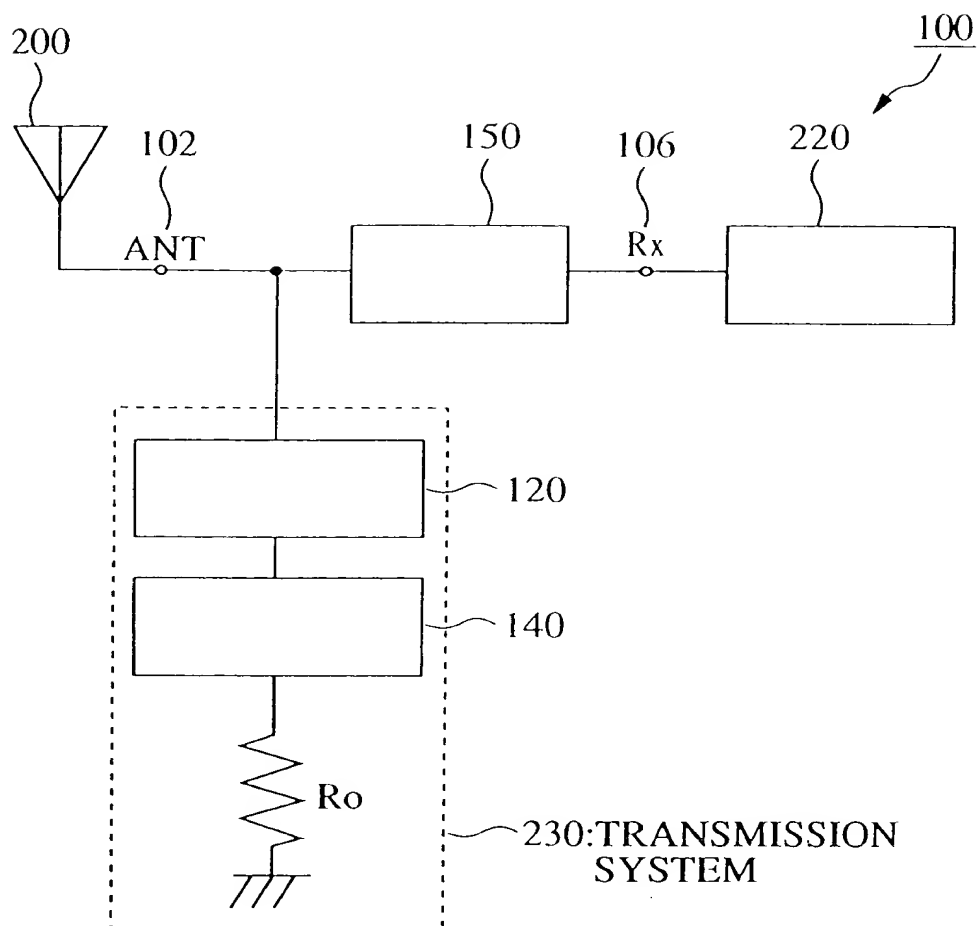


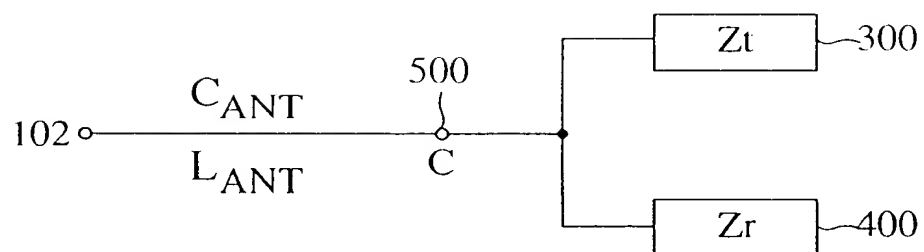
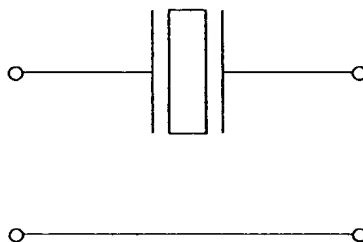
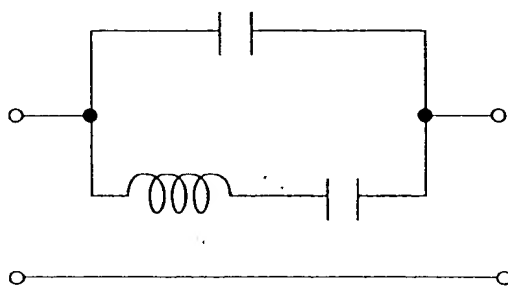
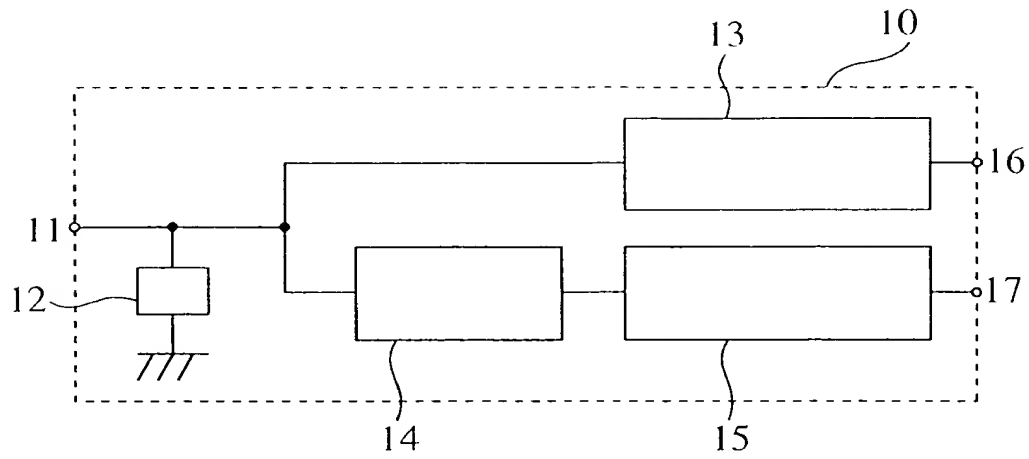
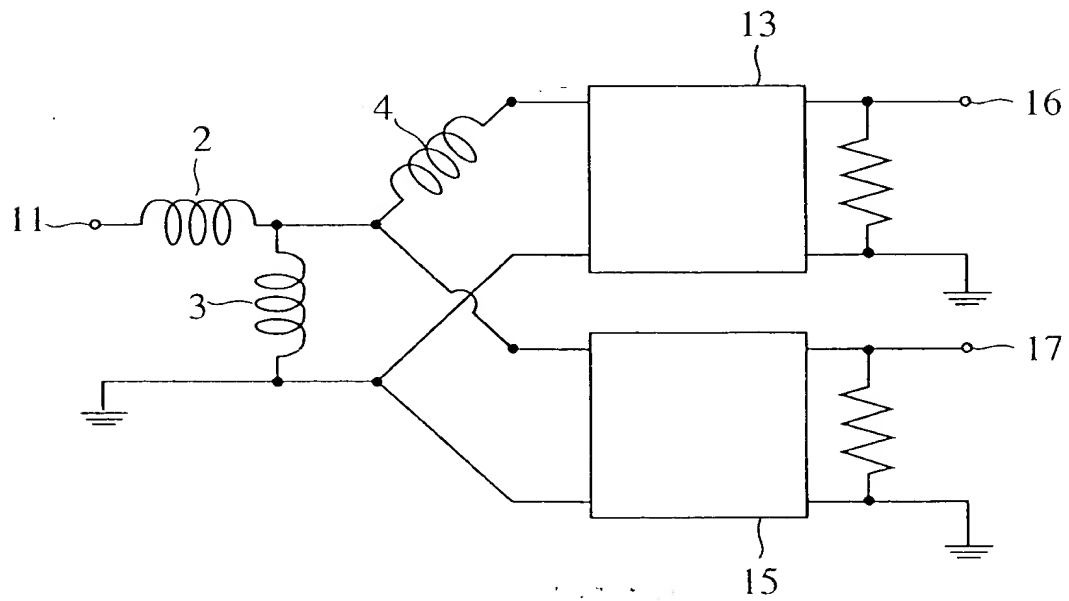
FIG. 7*FIG. 8(A)**FIG. 8(B)*

FIG. 9



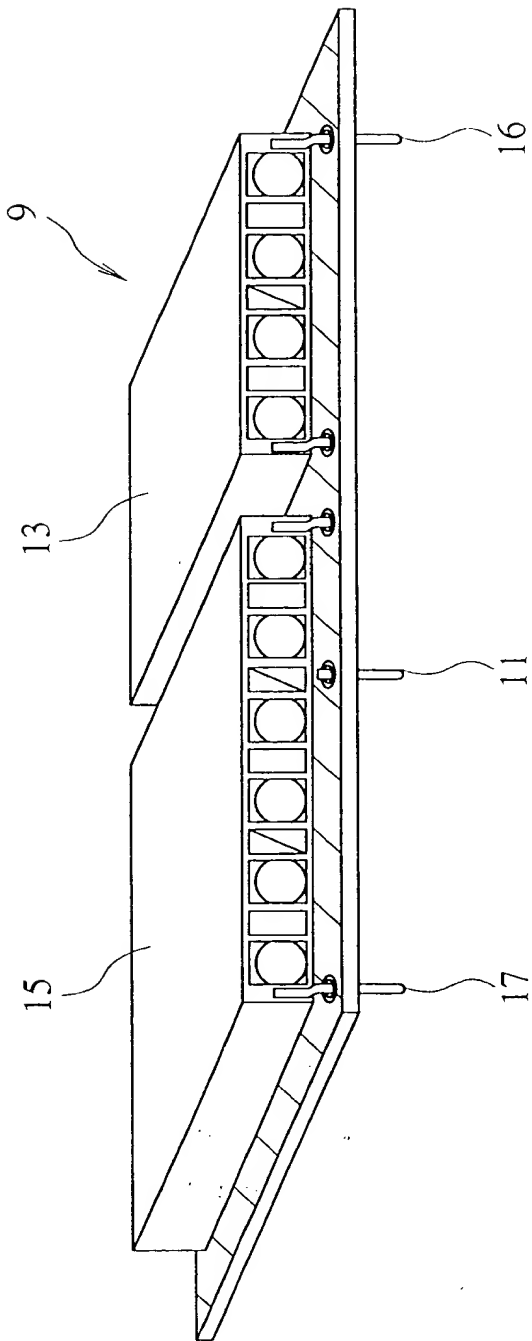
PRIOR ART

FIG. 10



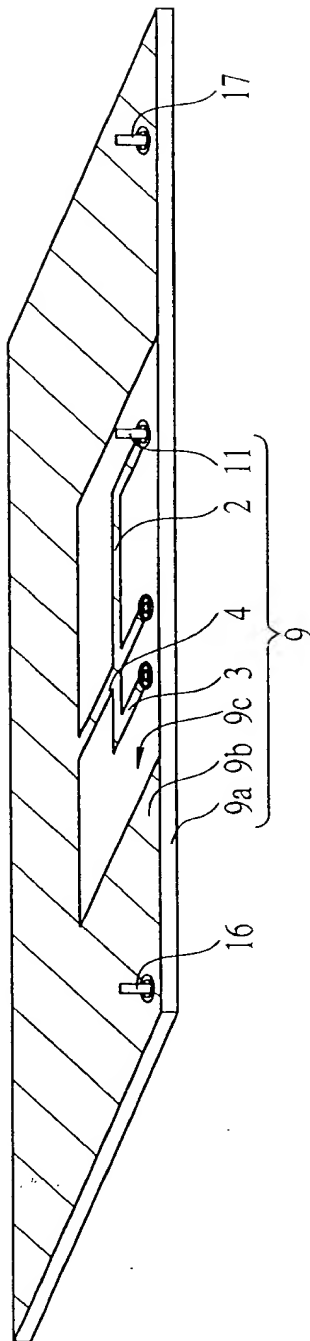
PRIOR ART

FIG. 11

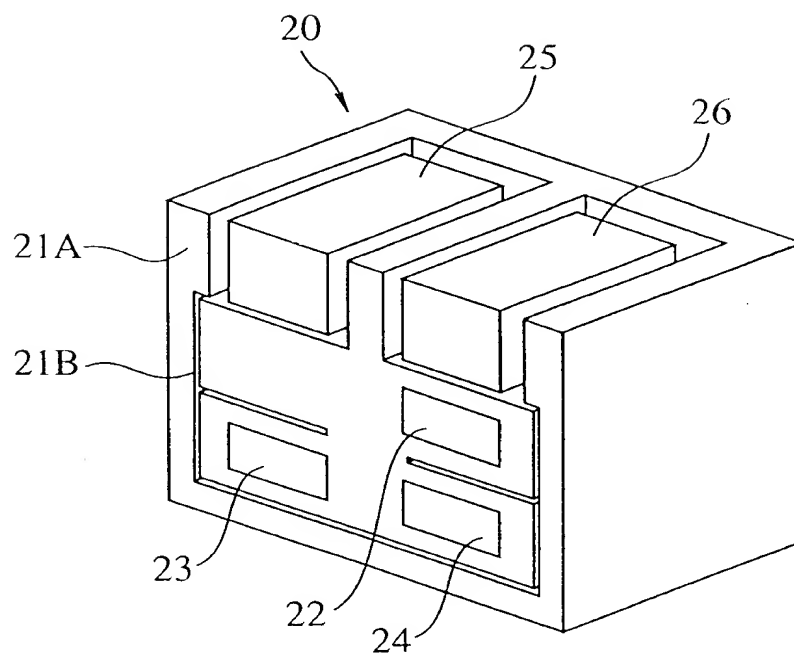


PRIOR ART

FIG. 12



PRIOR ART

FIG. 13

PRIOR ART

TABLE 1

TRANSMISSION FILTER		TS1		TS2		TS3		TS4	
		D(μ m)	M	D(μ m)	M	D(μ m)	M	D(μ m)	M
		85	90	42.5	90	84	86	60	60
RECEIVING FILTER		R _x S		RS1		RS2		RS3	
		D(μ m)	M	D(μ m)	M	D(μ m)	M	D(μ m)	M
		124	90	124	90	62	90	62	90
		PARAL- LEL ARM		RP1		RP2		RP3	
D(μ m)	M			D(μ m)	M	D(μ m)	M		
102	120			102	120	76	80		

TABLE 2

	BRANCHING FILTER CIRCUIT FREQUENCY ADJUSTING LC ELEMENT		TRANSMISSION FILTER				RECEIVING FILTER			
	LT=0 (mm)	LR=40 (mm)	1.22	1.17	35.7	36.8	31.6	58.5	3.11	3.04
I	LT=0 (mm)	LR=0 (mm)	3.56	3.21	37.9	28.6	33.0	55.6	3.11	2.32
II	LT _{ANT} = 7 (nH)	C _{ANT} = 7 (pF)	1.28	1.28	36.6	35.0	34.1	59.0	3.28	3.20
III	LT _{ANT} = 7 (nH)		1.30	1.32	34.7	33.2	35.1	58.5	3.74	4.0
IV	LT _{ANT} = 10 (nH)		1.37	1.08	36.1	29.2	35.5	54.7	3.10	3.70

TABLE 3

		TRANSMISSION FILTER					RECEIVING FILTER				
		FREQUENCY (MHz)	890	900	915	935	960	890	900	915	935
II	REAL NUMBER	1.283	0.8627	1.345	2.313	0.0831	0.0127	0.0175	0.0320	0.606	0.7414
	IMAGINARY NUMBER	-0.816	-0.6256	0.5287	0.8715	-4.017	-1.098	-0.934	-0.654	-0.017	1.263
IV	REAL NUMBER	1.283	0.8627	1.345	2.313	0.0831	3.540	4.7507	0.435	0.875	0.2421
	IMAGINARY NUMBER	-0.816	-0.6256	0.5287	0.8715	-4.017	23.20			0.0479	1.150